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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/797,186	03/11/2004	Akiko Niimi	119077	4948

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EXAMINER

CRENSHAW, MARVIN P

ART UNIT	PAPER NUMBER
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2854

DATE MAILED: 11/02/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No. 10/797,186	Applicant(s) NIIMI, AKIKO	
	Examiner Marvin P. Crenshaw	Art Unit 2854	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 11 March 2004.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1 - 15 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1 - 15 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 11 March 2004 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some * c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

Claim Rejections - 35 USC § 112

The following is a quotation of the first paragraph of 35 U.S.C. 112:

The specification shall contain a written description of the invention, and of the manner and process of making and using it, in such full, clear, concise, and exact terms as to enable any person skilled in the art to which it pertains, or with which it is most nearly connected, to make and use the same and shall set forth the best mode contemplated by the inventor of carrying out his invention.

Claim 13 is rejected under 35 U.S.C. 112, first paragraph, as failing to comply with the written description requirement. The claim(s) contains subject matter which was not described in the specification in such a way as to reasonably convey to one skilled in the relevant art that the inventor(s), at the time the application was filed, had possession of the claimed invention. The new matter that was not described in the specification is how the screen plate and the frame includes at least one projection and a groove and the printing medium supporting member includes the other of the projection and the groove and the groove locks the screen plate in position relative to the printing medium supporting member.

Drawings

The drawings are objected to under 37 CFR 1.83(a). The drawings must show every feature of the invention specified in the claims. Therefore, the screen plate and the frame including at least one projection and a groove and the printing medium supporting member including the other of the projection and the groove must be shown or the feature(s) canceled from the claim(s). No new matter should be entered.

Corrected drawing sheets in compliance with 37 CFR 1.121(d) are required in reply to the Office action to avoid abandonment of the application. Any amended

replacement drawing sheet should include all of the figures appearing on the immediate prior version of the sheet, even if only one figure is being amended. The figure or figure number of an amended drawing should not be labeled as "amended." If a drawing figure is to be canceled, the appropriate figure must be removed from the replacement sheet, and where necessary, the remaining figures must be renumbered and appropriate changes made to the brief description of the several views of the drawings for consistency. Additional replacement sheets may be necessary to show the renumbering of the remaining figures. Each drawing sheet submitted after the filing date of an application must be labeled in the top margin as either "Replacement Sheet" or "New Sheet" pursuant to 37 CFR 1.121(d). If the changes are not accepted by the examiner, the applicant will be notified and informed of any required corrective action in the next Office action. The objection to the drawings will not be held in abeyance.

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claim 1 is rejected under 35 U.S.C. 103(a) as being unpatentable over Witte in view of Matsumoto et al.

Witte teaches a printing device (Fig. 1) comprising a printing medium supporting member (22) having a supporting face for supporting a printing medium, a screen plate (30) fitting detachably onto said supporting face in a state where the printing medium is sandwiched between said screen plate and said supporting face of said printing medium supporting member.

However, Witte does not teach an ink-jet head for performing ink-jet printing onto said printing medium that has been subjected to screen-printing by said screen plate in a state where said printing medium is supported on said supporting face of said printing medium supporting member.

Matsumoto teaches an ink-jet head for performing ink-jet printing onto said printing medium (See col. 2, lines 15 – 20). In Matsumoto, the printing medium is subjected to screen printing as well as ink jet printing (See Abstract).

It would have been obvious to modify Witte by replacing one of the screen printing mechanism with an ink-jet printer since Matsumoto teaches that it is desirable to use both screen printing and inkjet printing on the same medium. This combination results in the printing medium being supported on the face of the supporting member during both screen printing and ink-jet printing.

Claim Rejections - 35 USC § 102

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

Claims 10 and 11 are rejected under 35 U.S.C. 102(b) as being anticipated by Matsumoto et al.

With respect to claim 10, Matsumoto et al. teaches a printing method comprising the steps of screen printing onto a printing medium by a screen plate (See col. 2, lines 23 – 35) and ink-jet printing (See col. 2, lines 18 – 22) by emitting ink of a darker color than the ink used in said screen printing step, onto the screen printed region, from an ink-jet head.

With respect to claim 10, applicant claims “ink-jet printing by emitting ink of a darker color than the ink used in the screen printing step” would be obvious to one of ordinary skill in the art since Matsumoto teaches a correction table generation unit (12) which allows the adjustment of colors during printing per user’s instructions.

With respect to claim 11, Matsumoto et al. teaches a printing method wherein the ink used in said screen printing step is white in color (See col. 2, lines 8 – 14).

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claims 2, 3, 8 and 9 are rejected under 35 U.S.C. 103(a) as being unpatentable over Witte in view of Matsumoto et al. and further in view of Siegeritz.

Witte as modified by Matsumoto et al. teaches all that is claimed, as discussed in the above rejection of claim 1 except, an ink determining means for determining the density of ink and the color.

Siegeritz teaches a printing device further comprising ink color determining means (See paragraph 0014) for setting the color of the ink used in printing by means of said screen plate to a lighter color than the ink used in printing means of the ink emission section and a printing device wherein said ink color determining means set the color of the ink used in printing by means of the screen plate to white (See paragraph 0067).

It would have been obvious to further modify Witte to have an ink determining means for determining and setting the color used in printing to white as taught by Siegeritz so as to provide an efficient means for selecting the color of ink to use for printing.

Claims 4 - 7 are rejected under 35 U.S.C. 103(a) as being unpatentable over Witte in view of Matsumoto et al. and further in view of Koizumi et al.

Witte as modified by Matsumoto et al teach all that is claimed, as discussed in the above rejection of claim 1 except, a printing device having a plurality of screen plates and the printing medium is fabric.

Koizumi et al. teaches a printing device wherein a plurality of said screen plates (See col. 1, lines 18 – 25) of different types are prepared and a printing device wherein the printing medium is a fabric (See col. 1, lines 14 - 18).

It would have been obvious to further modify Witte with a printing device wherein a plurality of screen plates of different types are prepared and the printing medium is fabric as taught by Koizumi et al. to provide a plurality of screen printing plates corresponding to the respective colors that are used for recoating.

With respect to claim 5, it would have been obvious to one of ordinary skill in the art to have printing device wherein said printing medium supporting member comprises an adjusting mechanism (See Col. 12, lines 46 – 65) to provide Koizumi to have a means to securely position the medium for ink-jet textile printing.

With respect to claim 6, it would have been obvious to one of ordinary skill in the art to provide the printing device wherein said screen plate is of substantially the same shape as said supporting face to have an inexpensive printing device (See col. 3, lines 7 – 10) for easily mounting and exchanging the screen plates for printing.

Claim 12 - 15 are rejected under 35 U.S.C. 103(a) as being unpatentable over Witte in view of Matsumoto et al. and further in view of Thorpe.

Witte teaches a printing device (Fig. 1) comprising a printing medium supporting member (22) having a supporting face for supporting a printing medium, a screen plate (30) fitting detachably onto said supporting face in a state where the printing medium is

sandwiched between said screen plate and said supporting face of said printing medium supporting member.

However, Witte does not teach an ink-jet head for performing ink-jet printing onto said printing medium that has been subjected to screen-printing by said screen plate in a state where said printing medium is supported on said supporting face of said printing medium supporting member.

Matsumoto teaches an ink-jet head for performing ink-jet printing onto said printing medium (See col. 2, lines 15 – 20). In Matsumoto, the printing medium is subjected to screen printing as well as ink jet printing (See Abstract).

It would have been obvious to modify Witte by replacing one of the screens printing mechanism with an ink-jet printer since Matsumoto teaches that it is desirable to use both screen printing and inkjet printing on the same medium. This combination results in the printing medium being supported on the face of the supporting member during both screen printing and ink-jet printing.

With regard to claim 12 and 13, Witte as modified by Matsumoto does not teach a frame, wherein the screen plate together with the frame have a lock-and-key relationship with the printing medium supporting member.

Thorpe teaches a frame (13) wherein the screen plate (16) together with the frame have a lock-and-key relationship with the printing medium supporting member (Fig.1). This lock and key relationship is achieved by the groove 23 and projection 24. Please note that in claim 13 applicant has set forth that a lock and key relationship can be achieved from a groove and a projection.

It would have been obvious to further modify Witte to have the screen plate and the frame include at least one projection and a groove as taught by Thorpe to provide a secure means for locking the screen plate to the frame while printing.

With respect to claim 14, Witte teaches a printing device wherein the screen plate is integrally connected to the frame (paragraph 0042).

With respect to claim 15, Witte teaches a printing device wherein the screen plate is detachably attached to the frame (paragraph 0042).

Response to Arguments

Applicant's arguments with respect to claims 1 - 11 have been considered but are moot in view of the new ground(s) of rejection. Witte has been added to teach printing using a screen plate on a supporting member. Matsumoto has been added to teach the using ink jet printing for textile printing,

Also, Benedetto et al. has been added to teach the lock and key relationship of the frame to the stencil screen.

Also, Vasilantone has been added to teach the structure of securing the screen plate to the frame.

Conclusion

Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Marvin P. Crenshaw whose telephone number is (571) 272-2158. The examiner can normally be reached on Monday - Thursday 7:00 - 5:00.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Andrew Hirshfeld can be reached on (571) 272-2168. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Application/Control Number: 10/797,186
Art Unit: 2854

Page 11



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